Results of the 2008 Avian Monitoring Surveys Conducted at the Morris Wetland Mitigation Bank Site, Grundy County, Illinois

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Introduction

On 29 March 1999, the Illinois Department of Transportation (IDOT) requested that we monitor the breeding season avian fauna within the Morris Wetland Banking Site near Morris in Grundy County (Figure 1). We were asked to perform a Level 2 Wildlife Assessment as described in the Illinois Wetland Restoration and Creation Guide (Admiraal et al. 1997). Breeding season censuses at the banking site were conducted for three consecutive years. We were instructed to discontinue surveys in 2001. Memoranda detailing the results of the three breeding season surveys completed (1999, 2000 and 2001) have been forwarded to IDOT.

In May of 2007 we were instructed to resume avian surveys at this site expanding census coverage to all four seasons. At the time of the request the winter and spring migration seasons had already passed, therefore, the 2007 report forwarded to IDOT contained only breeding and fall migration season survey results. We were also tasked to monitor a newly established heron rookery located in the southwest quadrant of the property (Figure 1). This report contains the results of the completed four season surveys conducted in 2008.

Project Area

The Morris Wetland Banking Site is located in Grundy County just south of Morris (Figure 1). It is bounded on the north by the Illinois River, to the west by IL 47, on the south by Pine Bluff Road and to the east by various private and county owned properties, and is approximately 365 ha in area. The legal location of the project area is: ILLINOIS, Grundy County. 3rd Principal Meridian: Township 33 North, Range 7 East, portions of Sections 2, 3, 10, and 11.

Approximately 60% of the property is comprised of old fields that have developed into grass/forblands or have been planted with a variety of wetland tree species. Portions of the Mazon River and Mud Slough meander through the site. These two water courses are bordered by strips of riparian forest that cover approximately 20% of the site. An additional 10% of the area is composed of shrub/forbland that borders a section of Mud Slough. The remaining 10% of the site is covered by open water.

Methods

Twenty-two census points were established in the Morris Wetland Banking Site in all major cover types during 1999 (Figure 1 and Table 1). One additional point was established in 2000 within a proposed wetland creation site (Point 23). These points, with the exception of census point 13 to which access was blocked by flood debris throughout 2008 were used in the 2008 censuses. All census point locations are identified on a set of aerial photographs and on figure 1.

We sub-sampled non-linear (i.e. at least 50 m in narrowest dimension) habitat parcels using point counts (Manley et al. 1993; Ralph et al. 1993). We recorded all

individual birds seen or heard within a range of 75 meters (including birds seen flying over) during 10-minute count periods. These timed counts provide measures of the structure of bird communities (number of individuals and number of species) within the various habitat types. Birds detected outside the habitat type during a point count were included in the species list for the project (Table 2), but not in the census list for that point (Tables 3, 5 and 7). We also recorded all birds seen or heard within the project area outside of the 10-minute count periods. These sightings are also included in our species list for the project area (Table 2).

Results

One hundred six species representing 38 families have been observed at the Morris Wetland Banking Site since avian surveys were initiated in 1999 (Table 2). Of these, 83 species, including 12 new species, were observed at the Morris site during the 2008 visits.

Only Great Blue Herons were observed entering or leaving the vicinity of the heron rookery located near census point 6 (Figure 1). In order not to disturb the nesting herons, we remained at least 100 m away from the rookery during the breeding season. Approximately 70 nests (up from 55 in 2007), built in two large and a number of smaller Sycamore trees (Plantanus occidentalis) situated within 50 m of each other on both sides of the Mazon River, were counted during the final 2008 fall migration visit (Figure 1).

Winter Season

Three attempts at conducting winter season censuses were made in 2008. Each time adverse weather or site conditions prevented the completion of the surveys. Therefore, no winter season censuses were completed in 2008.

Spring Season

Spring season censuses were conducted on 26 March and 30 April 2008. Two hundred sixty one individuals representing 40 species were recorded within 75 m of census points during our timed censuses (Table 3). Fifteen additional species were recorded beyond the 75 m count threshold during censuses or while moving between census points bringing the total number of species observed during the 2008 breeding season at the Morris Wetland Banking Site to 55 (Table 4). One Illinois endangered species, the Northern Harrier, and one Illinois threatened species, the Bald Eagle, were detected during the March visit to the site in 2008.

Breeding Season

Breeding censuses were conducted on 19 June and 18 July 2008. Three hundred twenty five individuals representing 37 species were recorded within 75 m of census points during our timed censuses (Table 5). Thirteen additional species were recorded

beyond the 75 m count threshold during censuses or while moving between census points bringing the total number of species observed during the 2008 breeding season at the Morris Wetland Banking Site to 50 (Table 6). No Federal or Illinois listed species were detected during any breeding season visits to the site in 2008.

Fall Migration Season

Fall migration season censuses were conducted 22 October and 18 November 2008. Eight hundred thirteen individuals representing 20 species were recorded within 75 m of census points during our timed censuses (Table 7). One additional species was recorded beyond the 75 m count threshold during censuses or while moving between census points bringing the total number of species observed during the 2008 fall migration season at the Morris Wetland Banking Site to 21 (Table 8). No Federally listed species where observed, however, one Illinois threatened species, the Sandhill Crane, was detected flying over the site during the November visit to the site.

Discussion

One hundred six species representing 38 families have been observed at the Morris Wetland Banking Site since avian surveys were initiated in 1999 (Table 2). Of these, 83 species, including 12 new species, were observed at the Morris site during the 2008 visits. One Illinois endangered species, the Northern Harrier and two Illinois threatened species, the Bald Eagle and the Sandhill Crane, were observed at the Morris Wetland site during the spring or fall migration period.

The Great Blue Heron rookery located near census point 6 increased to approximately 70 nests in 2008 (55 in 2007).

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Table 1. Description of habitat surrounding census points established in the Morris Wetland Banking Site, Grundy County, Illinois.

Census Point	Habitat Description	Legal Location
1	Floodplain Terrace Forest	Grundy Co., IL; T 33 N, R 7E; Section 10, SE/4, SW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,577,790mN 381,810mE
2	Old field	Grundy Co., IL; T 33 N, R 7E; Section 10, SE/4, SE/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,577,775mN 381,430mE
3	Floodplain Terrace Forest	Grundy Co., IL; T 33 N, R 7E; Section 10, NE/4, SW/4, SE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,577,900mN 382,100mE
4	Floodplain Forest	Grundy Co., IL; T 33 N, R 7E; Section 10, NW/4, SW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,577,990mN 381,190mE
5	Old Field Tree Planting	Grundy Co., IL; T 33 N, R 7E; Section 10, NW/4, SE/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,010mN 381,460mE
6	Floodplain Forest	Grundy Co., IL; T 33 N, R 7E; Section 10, NE/4, SE/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,000mN 381,720mE

Table 1 continued on following page.

 Table 1. Description of habitat surrounding census points (Continued).

Census Point	Habitat Description	Legal Location
7	Floodplain Forest	Grundy Co., IL; T 33 N, R 7E; Section 10, SW/4, NW/4, SE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
8	Floodplain Forest / Backwater Pond	UTM Zone 16 4,578,150mN 381,900mE Grundy Co., IL; T 33 N, R 7E; Section 10, SE/4, NE/4, SE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,200mN 383,510mE
9	Floodplain Forest	Grundy Co., IL; T 33 N, R 7E; Section 11, SW/4, NW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,260mN 383,860mE
10	Floodplain Forest / Backwater Pond	Grundy Co., IL; T 33 N, R 7E; Section 11, NW/4, NE/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,340mN 383,120mE
11	Old Field Tree Planting	Grundy Co., IL; T 33 N, R 7E; Section 10, NE/4, NW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,400mN 381,320mE
12	Old Field	Grundy Co., IL; T 33 N, R 7E; Section 10, SW/4, SE/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,580mN 382,420mE

Table 1 continued on following page.

 Table 1. Description of habitat surrounding census points (Concluded).

Census Point	Habitat Description	Legal Location
13	Old Field	Grundy Co., IL; T 33 N, R 7E; Section 10, NW/4, SE/4, NW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
14	Shrubland	UTM Zone 16 4,578,660mN 381,500mE Grundy Co., IL; T 33 N, R 7E; Section 10, NE/4, SW/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,690mN 382,210mE
15	Old Field Tree Planting	Grundy Co., IL; T 33 N, R 7E; Section 11, NE/4, SW/4, NW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,730mN 382,960mE
16	Shrubland	Grundy Co., IL; T 33 N, R 7E; Section 10, NE/4, SE/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,850mN 382,500mE
17	Old Field Tree Planting	Grundy Co., IL; T 33 N, R 7E; Section 11, NE/4, SE/4, NW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,800mN 383,450mE
18	Old Field Tree Planting	Grundy Co., IL; T 33 N, R 7E; Section 11, NE/4, SW/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,578,800mN 383,820mE

Table 1 continued on following page.

 Table 1. Description of habitat surrounding census points (Concluded).

Census Point	Habitat Description	Legal Location
19	Floodplain Forest	Grundy Co., IL; T 33 N, R 7E; Section 11, SW/4, NW/4, NW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,579,100mN 382,710mE
20	Floodplain Terrace Forest	Grundy Co., IL; T 33 N, R 7E; Section 11, SW/4, NE/4, NW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,579,100mN 383,240mE
21	Old Field	Grundy Co., IL; T 33 N, R 7E; Section 10, NE/4, NE/4, NE/4; Morris, IL 7.5' series USGS topographic quadrangle map.
22	Old Field	UTM Zone 16 4,579,130mN 382,600mE Grundy Co., IL; T 33 N, R 7E; Section 2, SW/4, SE/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,579,390mN 383,250mE
23	Old Field	Grundy Co., IL; T 33 N, R 7E; Section 10, SW/4, SW/4, SW/4; Morris, IL 7.5' series USGS topographic quadrangle map.
		UTM Zone 16 4,577,750mN 381,150mE

Table 2. Cumulative list of bird species observed during all years of monitoring visits conducted at the Morris Wetland Banking study site, Grundy County, Illinois.

Nomenclature and taxonomic order from American Ornithologists' Union 2000 and Banks et al 2002, 2003, 2004, 2006 and 2007. Status from Illinois Endangered Species Protection Board 2006. Illinois occurrence and breeding status from Bohlen, H.D. 1989, Goetz 1989 and 1990, Goetz and Robinson 1988, Goetz and Stotz 1999, Johnson, D.B., P.R. Clyne and M.F. Deaton 1998, Johnson, D. B. and D. F. Stotz 2005, Kleen, Cordle and Montgomery 2004, Stotz, D.F. 2001, Stotz, D.F. and D.B. Johnson 2002, 2003 and 2004 and Williamson, C. 2002.

Family

Subfamily

Scientific name - Common Name

Family Anatidae

Sub-family Anserinae

Branta canadensis - Canada Goose *

Sub-family Anatinae

Aix sponsa - Wood Duck *

Anas platyrhynchos - Mallard *

Anas crecca – Green-winged Teal *

Family Phasianidae

Sub-family Meleagridinae

Meleagris gallopavo - Wild Turkey X, but reintroduced *

Family Pelecanidae

Pelecanus erythorrhynchos – American White Pelican

Family Phalacrocoracidae

Phalacrocorax auritus - Double-crested Cormorant *

Family Ardeidae

Ardea herodias - Great Blue Heron *

Ardea alba - Great Egret

Table 2. continued on following page.

Family

Subfamily

Scientific name - Common Name

Family Cathartidae

Cathartes aura - Turkey Vulture *

Family Accipitridae

Sub-family Accipitrinae

Haliaeetus leucocephalus - Bald Eagle ST FT*

Accipiter cooperii - Cooper's Hawk *

Buteo platypterus - Broad-winged Hawk *

Buteo jamaicensis - Red-tailed Hawk *

Circus cyaneus - Northern Harrier SE *

Family Gruidae

Grus Canadensis - Sandhill Crane ST *

Family Charadriidae

Charadrius vociferous - Killdeer

Family Laridae

Sub-family Larinae

Larus argentatus - Herring Gull *

Family Columbidae

Columba livia - Rock Pigeon *

Zenaida macroura - Mourning Dove *

Family Cuculidae

Sub-family Coccyzinae

Coccyzus americanus - Yellow-billed Cuckoo *

Table 2. continued on following page.

Family

Subfamily

Scientific name - Common Name

Family Strigidae

Megascops asio - Eastern Screech-owl * Strix varia - Barred Owl *

Family Apodidae

Sub-family Chaeturinae Chaetura pelagica - Chimney Swift *

Family Trochilidae

Sub-family Trochilinae

Archilochus colubris - Ruby-throated Hummingbird *

Family Alcedinidae

Sub-family Cerylinae

Megaceryle alcyon - Belted Kingfisher *

Family Picidae

Sub-family Picinae

Melanerpes erythrocephalus - Red-headed Woodpecker *

Melanerpes carolinus - Red-bellied Woodpecker *

Picoides pubescens - Downy Woodpecker *

Picoides villosus - Hairy Woodpecker *

Colaptes auratus - Northern Flicker *

Dryocopus pileatus - Pileated Woodpecker *

Table 2. continued on following page.

Family

Subfamily

Scientific name - Common Name

Family Tyrannidae

Sub-family Fluvicolinae

Contopus virens - Eastern Wood-pewee * Empidonax virescens - Acadian Flycatcher * Empidonax minimus - Least Flycatcher *

Sayornis phoebe - Eastern Phoebe *

Sub-family Tyranninae

Myiarchus crinitus - Great Crested Flycatcher *

Tyrannus tyrannus - Eastern Kingbird *

Family Vireonidae

Vireo flavifrons - Yellow-throated Vireo *

Vireo gilvus - Warbling Vireo *

Vireo olivaceus - Red-eyed Vireo *

Family Corvidae

Cyanocita cristata - Blue Jay *

Corvus brachyrhynchos - American Crow *

Family Hirundinidae

Sub-family Hirundininae

Progne subis - Purple Martin *

Tachycineta bicolor - Tree Swallow *

Stelgidopteryx serripennis - Northern Rough-winged Swallow *

Petrochelidon pyrrhonota - Cliff Swallow *

Hirundo rustica - Barn Swallow *

Table 2. continued on following page.

Family

Subfamily

Scientific name - Common Name

Family Paridae

Poecile atricapillus - Black-capped Chickadee * Baeolophus bicolor - Tufted Titmouse *

Family Sittidae

Sub-family Sittinae

Sitta carolinensis - White-breasted Nuthatch *

Family Certhiidae

Certhia americana - Brown Creeper *

Family Troglodytidae

Thryothorus ludovicianus - Carolina Wren * Troglodytes aedon - House Wren *

Family Regulidae

Regulus satrapa - Golden-crowned Kinglet Regulus calendula – Ruby-crowned Kinglet

Family Sylviidae

Sub-family Polioptilinae

Polioptila caerulea - Blue-gray Gnatcatcher *

Family Turdidae

Sialia sialis - Eastern Bluebird *

Catharus ustulatus - Swainson's Thrush

Hylocichla mustelina - Wood Thrush *

Turdus migratorius - American Robin *

Table 2. continued on following page.

Family

Subfamily

Scientific name - Common Name

Family Mimidae

Dumetella carolinensis - Gray Catbird *
Toxostoma rufum – Brown Thrasher *

Family Sturnidae

Sturnus vulgaris - European Starling I *

Family Bombycillidae

Bombycilla cedrorum - Cedar Waxwing *

Family Parulidae

Vermivora peregrina - Tennessee Warbler

Vermivora celata – Orange-crowned Warbler

Dendroica petechia - Yellow Warbler *

Parula Americana – Northern Parula *

Dendroica pensylvanica - Chestnut-sided Warbler *

Dendroica magnolia - Magnolia Warbler

Dendroica coronata – Yellow-rumped Warbler

Dendroica virens - Black-throated Green Warbler *

Dendroica palmarum - Palm Warbler

Dendroica striata - Blackpoll Warbler

Setophaga ruticilla - American Redstart *

Helmitheros vermivorum - Worm-eating Warbler *

Seiurus aurocapilla - Ovenbird *

Geothlypis trichas - Common Yellowthroat *

Icteria virens - Yellow-breasted Chat *

Family Thraupidae

Piranga olivacea - Scarlet Tanager *

Table 2. continued on following page.

Family

Subfamily

Scientific name - Common Name

Family Emberizidae

Pipilo erythrophthalmus - Eastern Towhee *

Spizella arborea – American Tree Sparrow

Spizella pusilla - Field Sparrow *

Pooecetes gramineus - Vesper Sparrow *

Passerculus sandwichensis - Savannah Sparrow *

Ammodramus savannarum - Grasshopper Sparrow *

Melospiza melodia - Song Sparrow *

Melospiza Georgiana – Swamp Sparrow

Zonotrichia albicollis - White-throated Sparrow *

Zonotrichia leucoollis – White-crowned Sparrow

Junco hyemalis - Dark-eyed Junco

Family Cardinalidae

Cardinalis cardinalis - Northern Cardinal *

Pheucticus ludovicianus - Rose-breasted Grosbeak *

Passerina cyanea - Indigo Bunting *

Spiza americana - Dickcissel *

Family Icteridae

Dolichonyx oryzivorus - Bobolink WL *

Agelaius phoeniceus - Red-winged Blackbird *

Sturnella magna - Eastern Meadowlark *

Euphagus carolinus - Rusty blackbird

Quiscalus quiscula - Common Grackle *

Molothrus ater - Brown-headed Cowbird *

Icterus galbula - Baltimore Oriole *

Table 2. concluded on following page.

Family

Subfamily

Scientific name - Common Name

Family Fringillidae

Sub-family Carduelinae

Carpodacus mexicanus - House Finch I *

Carduelis tristis - American Goldfinch *

Family Passeridae

Passer domesticus - House Sparrow I *

SE = State Endangered

FT = Federally Threatened

ST = State Treatened

X = Extirpated from Illinois

WL = Illinois Watch List

* = Confirmed Breeding in Illinois

I = Introduced

Table 3. Results of the 2008 spring season avian monitoring censuses conducted at the Morris Wetland Banking site, Grundy County, Illinois. The standardized common names of bird species are used (A.O.U. Check-list of North American Birds 1998). The values represent the highest of the counts for the two censuses conducted at each census point. Counts of the total number of individuals of each species at each point are presented as well as the total number of individuals of each species.

Census Point

Species	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	Tot.
American Robin	2			3	6	1		2		1			1	1	4	1	3	3		1		1	30
Blue Jay				2		1																	3
Carolina wren				1										1				2	1				5
European starling				1		3	1													1			6
Eastern Pheobe				1																			1
Downy Woodpecker	1		1	1		1		1	1					1	1		1	1					10
Red-winged Blackbird		3			2							1	2		5	2				2	2	5	24
Song Sparrow	1	3	1	1	4	1	2	2	2		2	1	4	3	2	2	2		3	1	1	3	41
Red-bellied Woodpecker	1		1				3	1							1		1	1				1	10
Northern Flicker						1	1		1						1								4
Black-capped Chickadee	3	1	2			5				3					2			1					17
White-breasted Nuthatch			1			1	3	1		1					2		1		1				11
Wood Duck						1	2																3
Northern Cardinal				1			1	2	2				1		3			2	1				13
Eastern Bluebird							2								1								3
Canada Goose	2																						2
Red-tailed Hawk																		3					3
Common grackle																			1				1
Tufted titmpose	2			2			2											1	1				8
Brown-headed Cowbird	1	1		1			1						1					1		1		2	9
White-crowned sparrow				1																			1
Yellow-rumped Warbler			2	1			3		3						3		3	1					16
Ruby-crowned Kinglet				1			1	1															3
Black-throated Green warbler			1				1											1				1	4
Field Sparrow		2																				1	3
Yellow warbler	1												1									1	3
Tree Swallow																						1	1
House wren	1		1			1		1	1									1					6
American Goldfinch	1	1						1					1							1			5
Palm Warbler			1				1								1								3
Swainson's Thrush			1																				1
White-throated Sparrow	1																						1
Gray Catbird	1																						1
Eastern Meadowlark											1												1
Grasshopper Sparrow											1												1
Swamp Sparrow														2	1								3
Common Yellowthroat																					1		1
Northern Parula																		1					1
Warbling Vireo														1									1
Eastern Towhee									1														1
Total Individuals	18	11	12	17	12	16	24	12	11	5	4	2	11	9	27	5	11	19	8	7	4	16	261
Total Species	13	6	10	13	13	3	14	9	6	3	3	2	7	6	13	3	6	13	6	6	3	9	40

Table 4. Cumulative list of all birds observed during 2008 spring season avian monitoring visits to the Morris Wetland Banking site, Grundy County, Illinois. The standardized common names of bird species are used (A.O.U. Check-list of North American Birds 1998).

Species

Species
Canada Goose
Wood duck
Mallard
Wild Turkey
Double-crested Cormorant
Great Blue Heron
Turkey Vulture
Bald Eagle
Northern Harrier
Red-tailed Hawk
Killdeer
Rock Pigeon
Mourning Dove
Belted Kingfisher
Red-bellied Woodpecker
Downy Woodpecker
Northern Flicker
Pleated Woodpecker
Eastern Pheobe
Warbling vireo
Blue Jay
American Crow
Tree Swallow
Barn Swallow
Black-capped Chickadee
Tufted Titmouse
White-breasted Nuthatch
Carolina Wren
House Wren
Ruby-crowned Kinglet
Blue-gray Gnatcatcher
Eastern Bluebird
Swainson's thrush
American Robin
Brown Thrasher
European Starling
Tennessee Warbler
Orange-crowned Warbler
Northern Parula

Table 4. concluded on following page.

Table 4. Cumulative list of all birds observed during 2008 spring season (concluded).

Species

Yellow Warbler

Yellow-rumped Warbler

Black-throated Green

warbler

Palm Warbler

Common Yellowthroat

Field Sparrow

Grasshopper sparrow

Song Sparrow

Swamp Sparrow

White-crowned Sparrow

Northern Cardinal

Red-winged Blackbird

Eastern Meadowlark

Common Grackle

Brown-headed Cowbird

American Goldfinch

55 Species Total

Table 5. Results of the 2007 breeding season avian monitoring censuses conducted at the Morris Wetland Banking site, Grundy County, Illinois. The standardized common names of bird species are used (A.O.U. Check-list of North American Birds 1998). The values represent the highest of the counts for the two censuses conducted at each census point. Counts of the total number of individuals of each species at each point are presented as well as the total number of individuals of each species.

Census Point

Species	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	Tot.
Red-tailed Hawk															1								1
Yellow-billed Cuckoo			1			1	2								1				1				6
Red-bellied Woodpecker			2	1		1	1	1	2								1	1	1				11
Downy Woodpecker	1		1	1		1	1	1															6
Northern Flicker			1				1		1								1						4
Eastern Wood-pewee	1		1	1		1			1	1							1	1	1				9
Great-crested Flycatcher				1			2												1				4
Eastern Kingbird		1												1									2
Yellow-throated Vireo	1					1																	2
Warbling Vireo	1	1											1	1									4
Red-eyed Vireo			1	1						1													3
Blue Jay							1		3								1						5
Black-capped chickadee						1		1										1	1				4
Tufted Titmouse				2															1				3
White-breasted Nuthatch	1		1				1										1	1	1				6
Carolina Wren				1																			1
House wren				1		2	1	3	2	1					2		1	1	1			2	17
Wood Thrush						2																	2
American Robin	1		1	2		2	3	2		1			1		1		1	2	1	1		1	20
Gray Catbird	1	1	1			1		1		1			1							1			8
Northern Parula			1																				1
Yellow Warbler																					1		1
American Redstart													1		2								3
Common Yellowthroat	1	3	1	1	3		1	1		1	1	2	3	2	1	2		1		2	2	2	30
Field Sparrow		2			2				1											1		1	7
Grasshopper Sparrow					1						2	2				2	1						8
Song Sparrow	1	1	1	1	2	2	1	1	1	2	2	2	1	1	1	1	1		1	2		2	27
Northern Cardinal	1		2	2		1		1	1						1			1	2			1	13
Rose-breasted Grosbeak	1												1					1	3	1			7
Indigo Bunting	1	1	1	2	1	1	2	1	2	2		1	2		2		1		2	1		2	25
Dickcissel		1			2						3	3		3		4	1				1		18
Red-winged Blackbird	1	4						1			2	1		15							5	1	30
Eastern Meadowlark												1											1
Common Grackle							5	2						5					1				13
Brown-headed Cowbird	1		2	1	1			1		1		1								1		2	11
Baltimore Oriole	1			1		1		1		1				1				1	1			1	9
American Goldfinch							1						1								1		3
Total Individuals	15	15	18	19	12	18	23	18	14	12	10	13	12	29	12	9	11	11	19	10	10	15	325
Total Species	14	9	15	15	7	14	14	14	9	10	57	7	9	8	9	4	10	10	15	8	5	10	37

Table 6. Cumulative list of all birds observed during all breeding season avian monitoring visits (1999 – 2001, 2007 and 2008) to the Morris Wetland Banking site, Grundy County, Illinois. The standardized common names of bird species are used (A.O.U. Check-list of North American Birds 1998).

Species	1999	2000	2001	2007	2008
Canada Goose			X		
Wood Duck			X		X
Mallard			X		
Wild Turkey			X	X	X
American white Pelican					X
Double-crested Cormorant		X			
Great Blue Heron	X	X	X	X	X
Great Egret		X			
Turkey Vulture		X	X		X
Bald Eagle		X			
Copper's Hawk		X			
Red-shouldered Hawk			X		
Broad-winged hawk	X				
Red-tailed Hawk	X	X	X	X	X
Rock Pigeon		X			
Mourning Dove	X	X	X		X
Yellow-billed Cuckoo		X	X	X	X
Chimney Swift	X	X		X	X
Ruby-throated Hummingbird			X		X
Belted Kingfisher		X	X	X	
Red-headed Woodpecker	X		X		
Red-bellied Woodpecker	X		X	X	X
Downey Woodpecker	X	X	X	X	X
Hairy Woodpecker	X				
Northern Flicker	X	X	X	X	X
Eastern Wood-pewee	X	X	X	X	X
Acadian Flycatcher	X				
Least Flycatcher			X		
Eastern Pheobe		X	X		
Great-crested Flycatcher	X	X	X	X	X
Eastern Kingbird	X				X
Yellow-throated Vireo	X	X	X		X
Warbling Vireo	X	X	X	X	X
Red-eyed Vireo	X	X	X	X	X
Blue Jay	X	X	X	X	X
American Crow	X	X	X		

Table 6. continued on following page.

Table 6. Cumulative list of all birds observed during all breeding season avian monitoring visits (continued)

Species	1999	2000	2001	2007	2008
Purple Martin	X	X	X		X
Tree Swallow	X		X	X	
Northern Rough-winged Swallow		X	X		X
Bank Swallow		X			
Barn Swallow			X		
Black-capped Chickadee	X	X	X		X
Tufted Titmouse	X	X	X	X	X
White-breasted Nuthatch	X	X	X	X	X
Carolina Wren	X	X	X		X
House Wren	X	X	X	X	X
Blue-gray Gnatcatcher	X		X		
Eastern Bluebird				X	
Swainson's Thrush	X				
Wood Thrush	X	X	X	X	X
American Robin	X	X	X	X	X
Gray Catbird	X	X	X	X	X
European Starling	X	X	X	X	X
Cedar Waxwing		X	X	X	
Tennessee Warbler	X		X		
Northern Parula					X
Yellow Warbler	X				X
Chestnut-sided Warbler	X		X		
Magnolia warbler			X		
Black-throated Green Warbler	X		X		
Blackpoll Warbler			X		
American Redstart		X	X	X	X
Worm-eating Warbler			X		
Ovenbird	X				
Common Yellowthroat	X	X	X	X	X
Yellow-breasted Chat	X	X		X	X
Scarlet Tanager		X	X		
Eastern Towhee			X		X
Field Sparrow	X			X	X
Savannah Sparrow		X			
Grasshopper Sparrow	X	X	X	X	X
Song Sparrow	X	X	X	X	X

Table 6. concluded on following page.

Table 6. Cumulative list of all birds observed during all breeding season avian monitoring visits (concluded).

Species	1999	2000	2001	2007	2008
White-throated Sparrow			X		
Northern Cardinal	X	X	X	X	X
Rose-breasted Grosbeak	X	X	X	X	X
Indigo Bunting	X	X	X	X	X
Dickcissel	X	X	X	X	X
Bobolink			X		
Red-winged Blackbird	X	X	X	X	X
Eastern Meadowlark				X	X
Common Grackle	X		X	X	X
Brown-Headed Cowbird	X	X	X	X	X
Baltimore Oriole	X	X	X	X	X
House Finch		X	X		
American Goldfinch	X	X	X	X	X
House Sparrow	X		X		
Total Species Per Year	52	51	65	40	50
Total Species All Years	85		·		·

Table 7. Results of the 2008 fall migration season avian monitoring censuses conducted at the Morris Wetland Banking site, Grundy County, Illinois. The standardized common names of bird species are used (A.O.U. Check-list of North American Birds 1998). The values represent the total of the counts for the two censuses conducted at each census point. Counts for each species at each point are presented as well as the total count for each species.

										(Cen	sus	Poi	nt									
Species	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	Tot.
American Robin	45	1	60	4		8		2	25	1			1		3		2	2	38	1			193
Northern Flicker			2	1			1															1	5
European Starling				1		5													1				7
White-throated Sparrow				2		1	1							4	1							1	10
Downy Woodpecker			1	2		1	1	2	1				1						1	1			11
Brown Creeper				4																			4
Black-capped Chickadee								2	1										1			3	7
White-breasted Nuthatch			1	2				1					1									1	6
Red-bellied Woodpecker	1		1	1		1	2		1				1					1	1	1		1	12
Yellow-rumped Warbler			2																				2
Golden-crowned Kinglet															5								5
Swamp Sparrow																				1			1
Song Sparrow																				1	1		2
Swainson's Thrush																	1						1
Cedar Waxwing									3														3
Northern Cardinal			1												1							1	3
Rusty Blackbird																						1	1
Common Grackle	500						30												1				531
Carolina Wren																			1				1
American Tree Sparrow					2											1					5		8
Total Individuals	546	1	68	17	2	16	35	7	31	1	0	0	4	4	10	1	3	3	44	5	6	9	813
Total Species	3	1	6	8	1	5	5	4	5	1	0	0	4	1	4	1	21	2	6	5	2	7	20

Table 7. Cumulative list of all birds observed during the 2007 and 2008 fall migration season avian monitoring visits to the Morris Wetland Banking site, Grundy County, Illinois. The standardized common names of bird species are used (A.O.U. Check-list of North American Birds 1998).

Species	2007	2008
Canada Goose	X	
Wood Duck	X	
Mallard	X	
American white Pelican		X
Great Blue Heron	X	X
Turkey Vulture	X	
Cooper's Hawk	X	
Red-tailed Hawk	X	X
Northern Harrier	X	
Sandhill Crane		X
Killdeer	X	
Herring Gull	X	
Chimney Swift	X	
Belted Kingfisher	X	X
Red-bellied Woodpecker	X	X
Downy Woodpecker	X	X
Northern Flicker	X	X
Pileated Woodpecker	X	
Eastern Wood-pewee	X	
Eastern Pheobe	X	
Blue Jay	X	
American Crow	X	
Black-capped Chickadee	X	X
Tufted Titmouse	X	
Brown Creeper	X	X
White-breasted Nuthatch	X	X
Brown Creeper		X
Carolina Wren	X	X
Golden-crowned Kinglet	X	X
Eastern Bluebird	X	X
Swainson's Thrush	X	X
American Robin	X	X
Gray Catbird	X	
European Starling	X	X
Cedar Waxwing	X	X
Yellow-rumped Warbler	X	X

Table 7. concluded on following page

Table 7. Cumulative list of all birds observed during the 2007 and 2008 fall migration season (concluded).

Species	2007	2008
Palm Warbler	X	
American Redstart	X	
Northern Waterthrush	X	
Common Yellowthroat	X	
American Tree Sparrow	X	X
Vesper Sparrow	X	
Swamp Sparrow	X	X
Song Sparrow	X	X
White-throated Sparrow	X	X
Dark-eyed Junco		X
Northern Cardinal	X	X
Rose-breasted Grosbeak	X	
Red-winged Blackbird	X	X
Rusty Blackbird		X
Common Grackle	X	X
Brown-headed Cowbird	X	
American Goldfinch	X	X
Total Species Per Year	48	28
Total Species All Years	53	

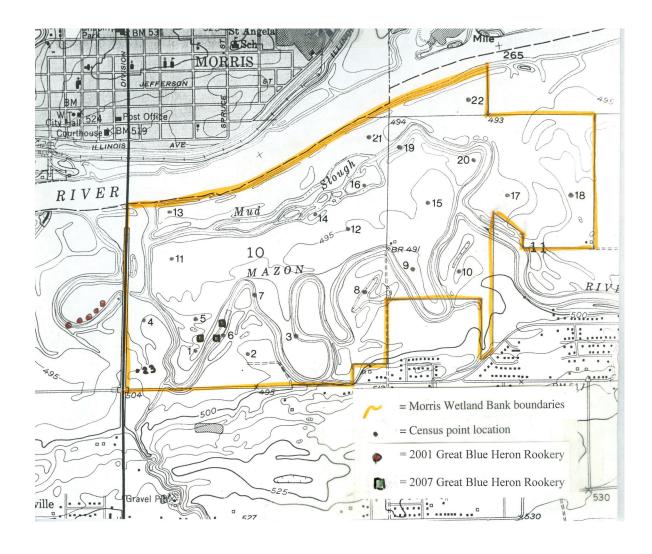


Figure 1. Location of the Morris Wetland Bank project area, the sighting points the 2001 and 2007 Great Blue Heron rookery located within the project area and the census points used in the avian survey of the project area.